

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 May 2005 (06.05.2005)

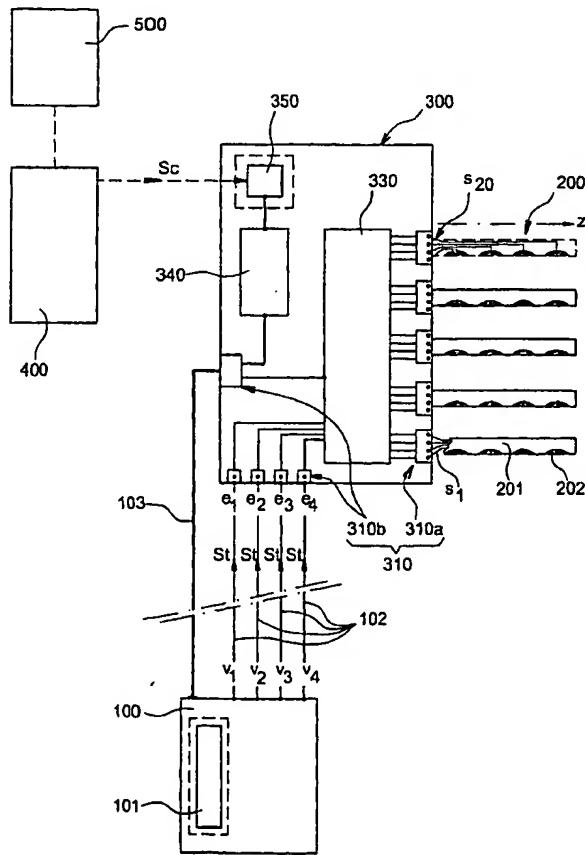
PCT

(10) International Publication Number
WO 2005/039694 A1

- (51) International Patent Classification⁷: **A61N 1/36**
- (21) International Application Number: **PCT/EP2004/052446**
- (22) International Filing Date: 5 October 2004 (05.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
03 50675 14 October 2003 (14.10.2003) FR
- (71) Applicants (*for all designated States except US*): COMMISSIONNAT A L'ENERGIE ATOMIQUE [FR/FR]; 31-33 rue de la Fédération, F-75752 PARIS 15ème (FR). INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE [FR/FR]; 101, rue de Tolbiac, F-75654 PARIS CEDEX 13 (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): CAILLAT, Patrice [FR/FR]; 8 rue de la Mure, F-38130 Echirolles (FR). BOURGERETTE, Alain [FR/FR]; 19 avenue Aristide Bergès, F-38190 VILLARD-BONNOT (FR). VACHERAND, François [FR/FR]; 8 rue de Metz, F-38800 PONT-DE-CLAIX (FR). BENABID, Aliim-Louis [FR/FR]; 23 bis avenue de l'Eygala, F-38240 MEYLAN (FR).
- (74) Agent: POULIN, Gérard; BREVATOME, 3, rue du Docteur Lancereaux, F-75008 PARIS (FR).
- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,

[Continued on next page]

(54) Title: IMPROVED CEREBRAL ELECTROSTIMULATION DEVICE



(57) Abstract: This invention relates to a cerebral electrostimulation device containing a commutation device (300) comprising at least one input and several outputs each connected to at least one biocompatible electrode or at least one active area (202) of a biocompatible electrode (200), the commutation device (300) being used to selectively connect at least one input to one or more outputs. This electrostimulation device may be used for methods of diagnostic or therapy for the treatment of some pathologies, for example such as epilepsy or Parkinson's disease.



PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

- (84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.